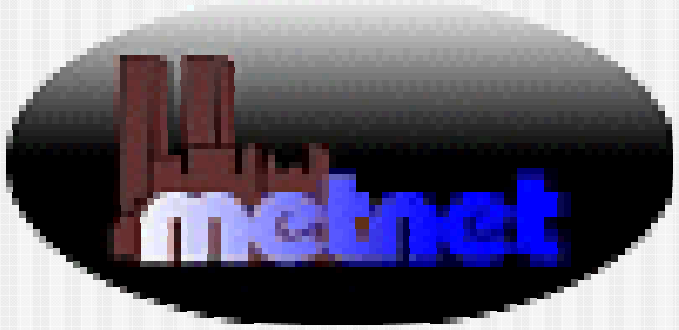
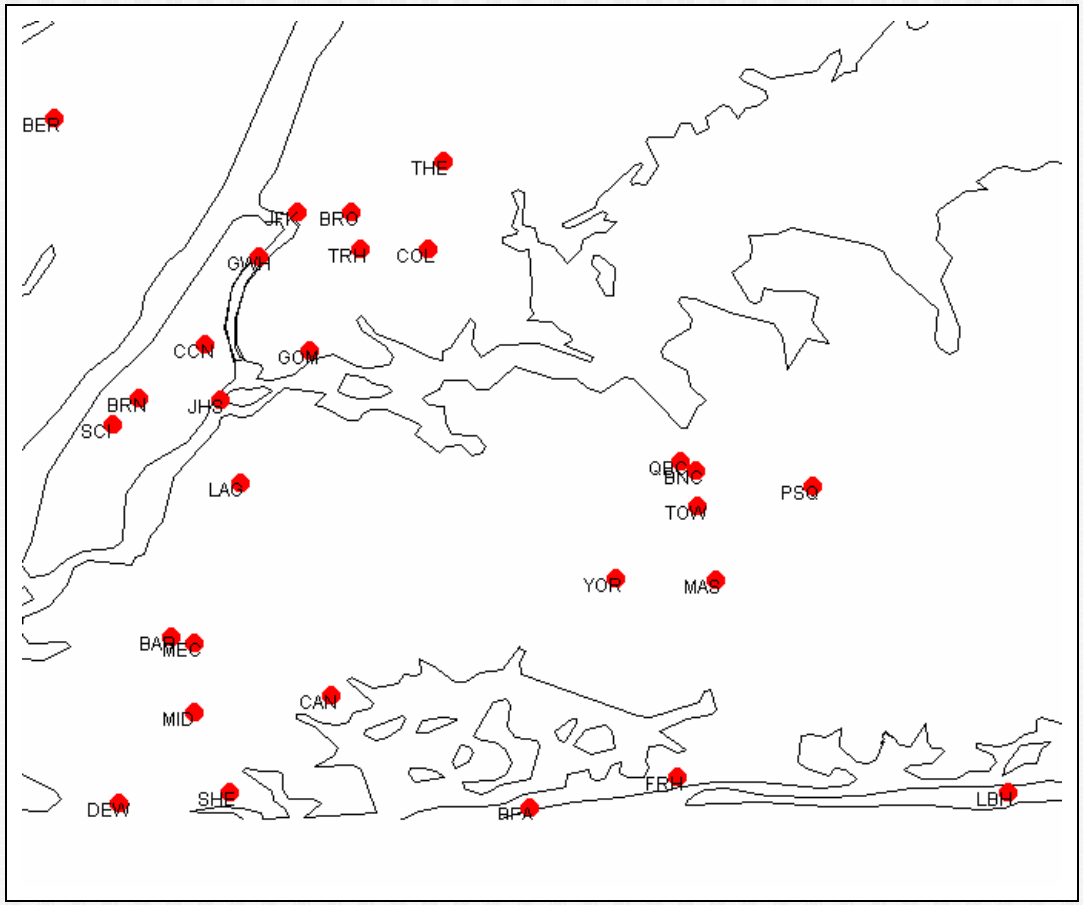
MUSPIN/NASA City College of New York Network Resource and Training Site



- MUSPIN-funded weather-data network in the NYC Metropolitan Area
- Supports faculty and student research and curriculum integration
- Inter-disciplinary program in Meteorology, Earth Science, Environmental Science and Computer Science
- Spans K-12 and undergraduate levels

NYC Weather Network(partial)



Motivation

- Leverage MUSPIN's technology investment
- Provide a common program
- Provide an entry-level platform for the exploration of broader issues:

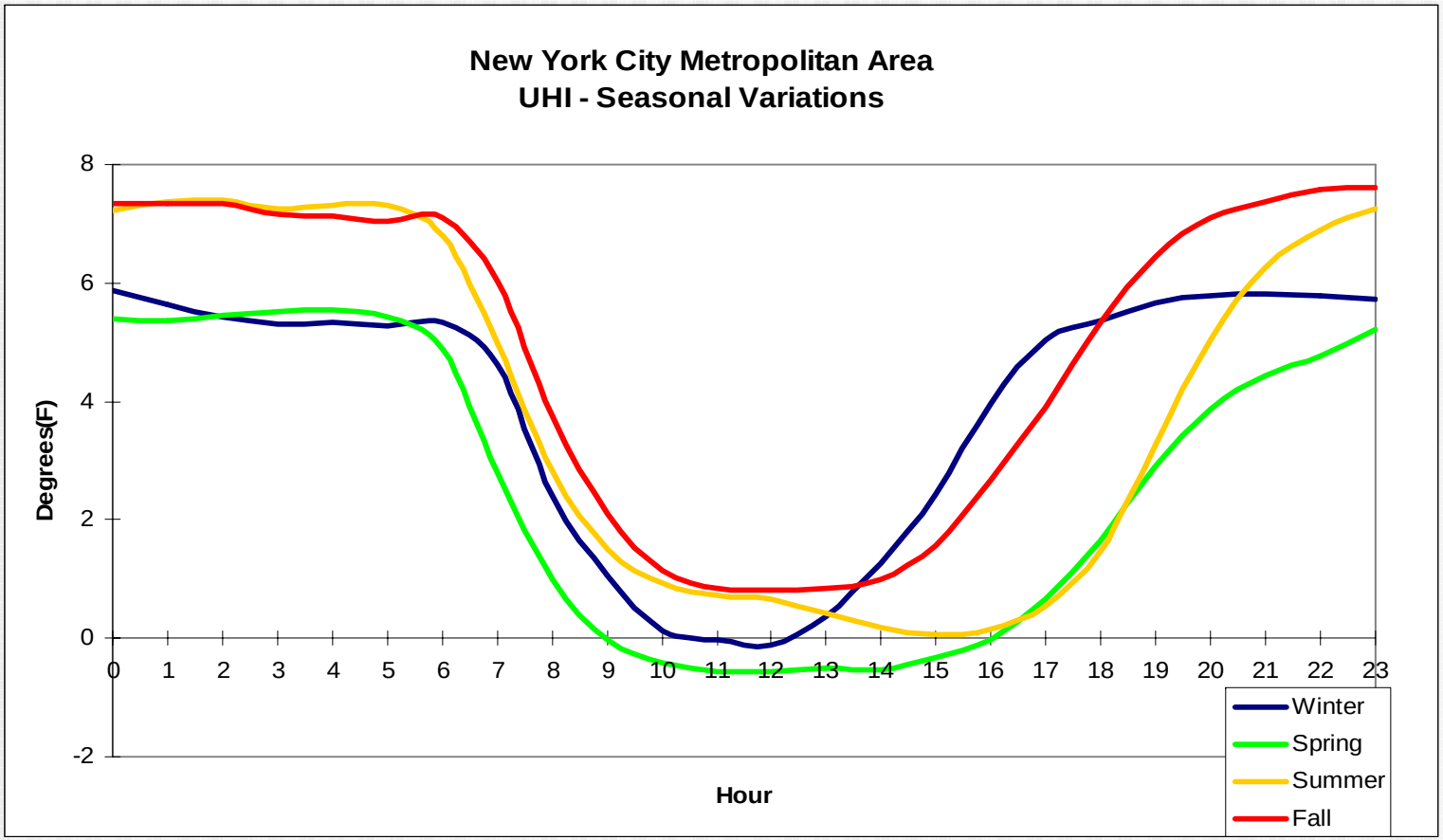
  local weather -> regional and synoptic scale patterns and features

  microclimate -> global climate

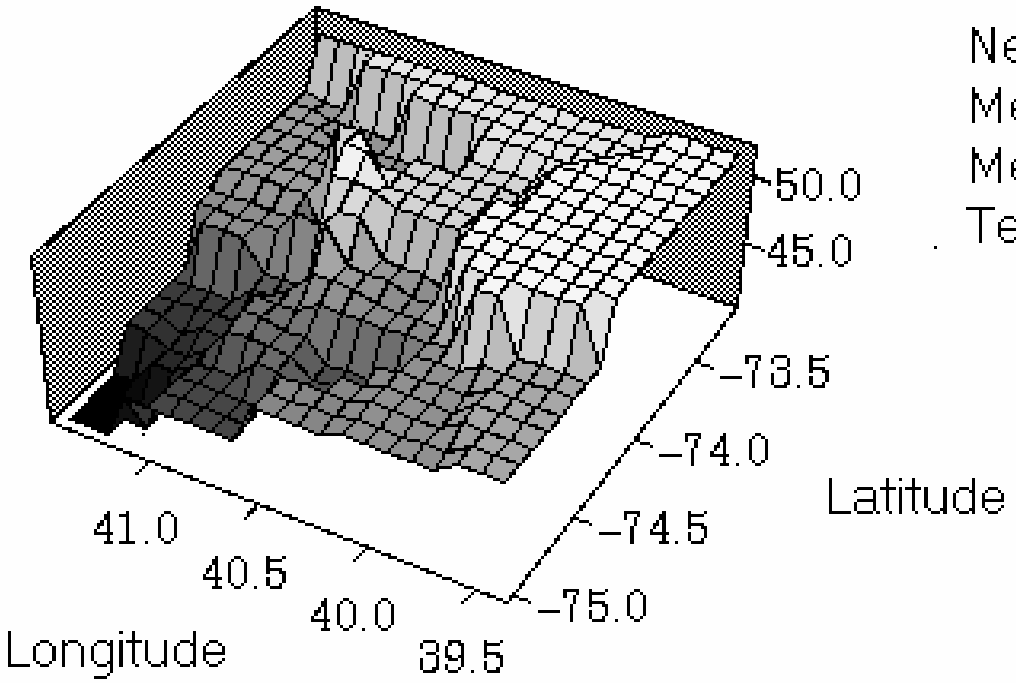
Project Activities - College

- Undergraduate Curriculum Integration in Earth Science, Meteorology and Computer Sciences
  - Illustrating Basic Weather Concepts
  - Visualization of Surface and Satellite Data
- Faculty/Student Research Investigations
  - NYC Urban Heat Island
  - Seabreeze circulation
  - Impact of Nor'easters
  - Intelligent Engines for Data Retrieval

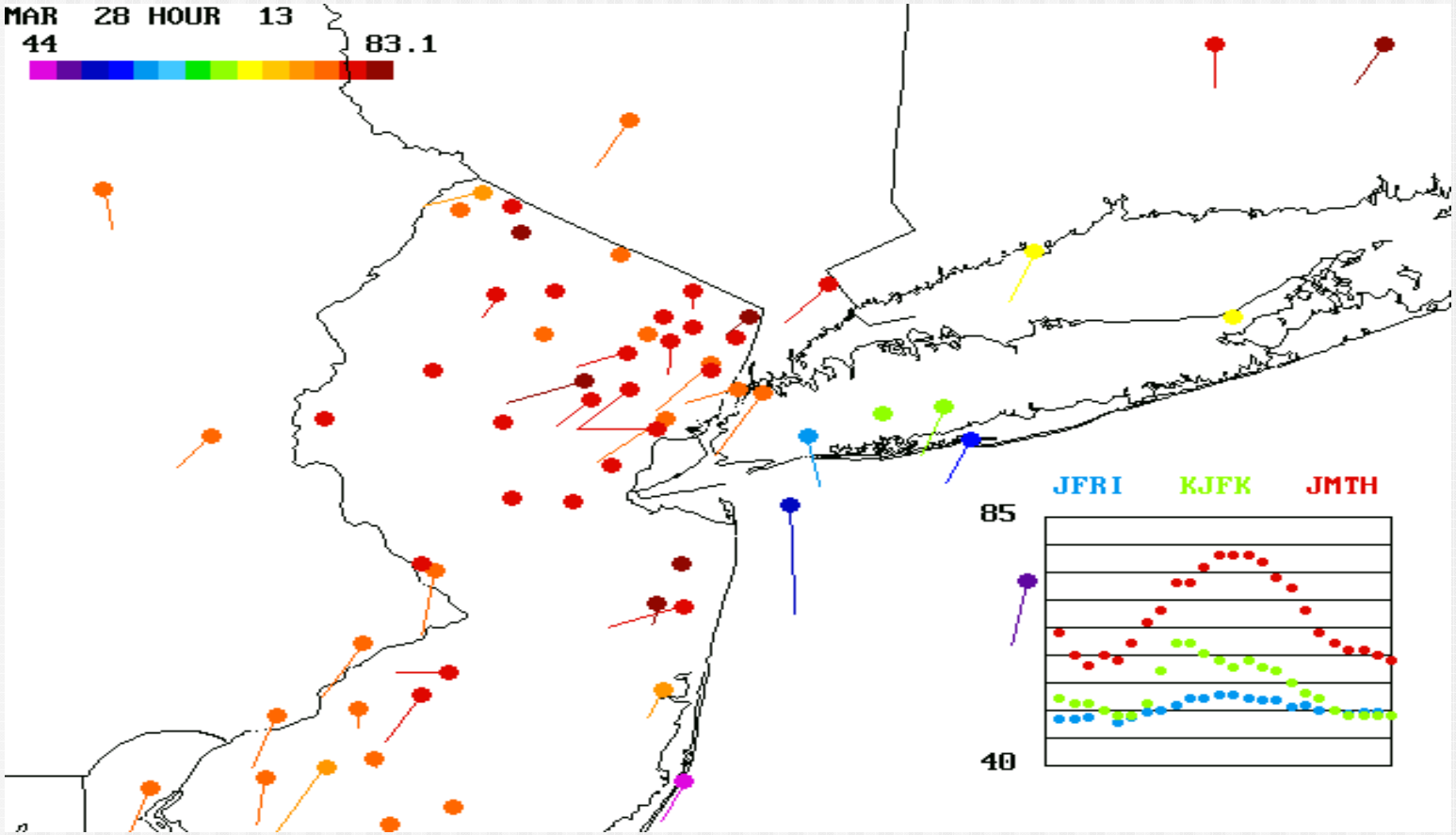
UHI Seasonal Variations



Regional Mean Minimum Temperatures



NJ Weather Network

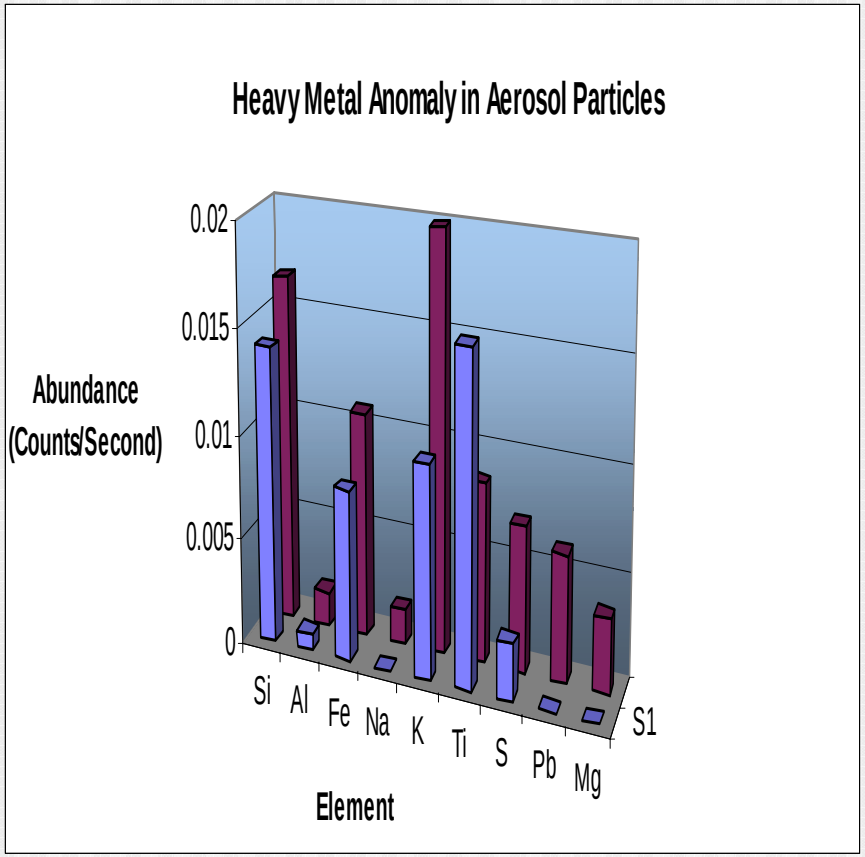


Collaborations

- Hand-held polarimeter project – LaGuardia Community College
- Local sunphotometer network – Medgar Evers College
- Pollen distribution project – George Washington HS

Relating Weather Patterns to Aerosol Content in NYC and NJ

- Climate modeling of aerosol particles
- Aerosol transport of heavy metals
- Student involvement in collection, mapping and interpretation
- Integration in inter-disciplinary GIS course



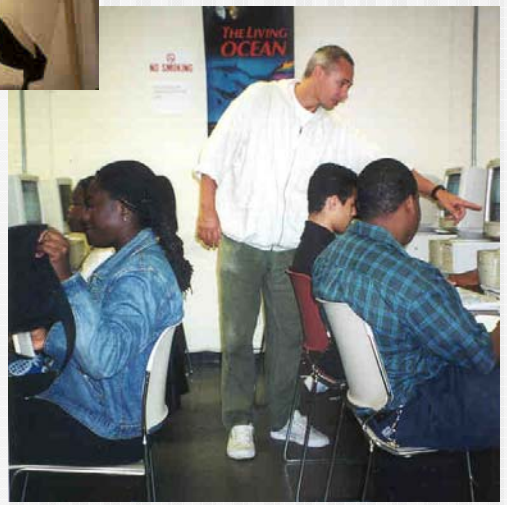
Project Activities – K-12

- Weather Watchers
- Integration of weather modules in Earth Science courses
- High School Research Investigations
- Staff Development for K-12 teachers
- Graduate content-based courses

Partners

- NWS
- NJ State Climatologist's Office, Rutgers University
- Institute for Climate and Planets/GISS
- New York Board of Education
- MASTAP/Medgar Evers College
- Signals of Spring, US Satellite, Inc.

WEATHER WATCH 2000
Graphs
Conclusion


THE LIVING OCEAN